# **NOAA COASTWATCH**

## U.S. coastal sea surface temperature and other products

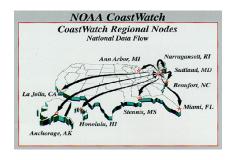
NOAA CoastWatch is a program organized to produce near-real-time coastal ocean analysis products derived from AVHRR satellite data and to make these products available to U.S. decision-makers, researchers, and other users. The primary product is sea surface temperature (SST) for the Great Lakes, northeast and southeast coasts, the Gulf of Mexico, Aleutian Islands, West Coast and Hawaii at 1.1 km and 4 km resolutions and for Jamaica and Puerto Rico at 1.1 km resolution. Channel 1, channel 2 and solar zenith angles are available for selected subregions for calculating turbidity.

The raw data from which these products are derived are collected using the Advanced Very High Resolution Radiometer (AVHRR), a radiation-detection instrument onboard one of NOAA's TIROS-n Polar-Orbiting

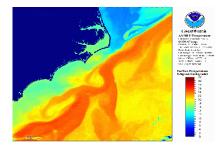
Environment Satellites. The data products are produced from HRPT (High Resolution Picture Transmission) 1.1 km resolution (at nadir) direct readout data obtained in real time. Areas covered by HRPT are confined to those regions over which the satellite is within line of sight of a ground station.

The product format is compressed binary with a 512byte header record, and approximately 512 data records of 512 bytes each. Users must decompress the data files (PC source version available) and provide their own image display capability.

Over 1.2 million images, dating back to 1989, are archived at the National Oceanographic Data Center. These data are currently available online via the NOAA CoastWatch Active Access System. Data may also be requested on magnetic tape, CD-ROM or other media.







#### **Data Availability**

The NODC provides access to coastal AVHRR images for specific geographic areas around the coastal United States (see page 2). The images available through NCAAS are near-real-time products, available within 24 hours for the East Coast, Gulf of Mexico, Great Lakes and Carribean regions. Data covering the West Coast, Alaska and Hawaii areas are generally available within 3 working days. The date of the earliest available images varies by region. Data are freely available to all interested users, but are of primary interest to researchers and coastal resource managers. To gain access to the historical data available in NCAAS, users must first register with NODC. Users are asked to provide the following information:

- full name
- physical mailing address
- telephone and fax numbers

- e-mail address
- brief description of how you hope to use the data

Requests for NCAAS data access should be directed to:

National Oceanographic Data Center NOAA/NESDIS E/OC1 SSMC-3, 4th Floor 1315 East-West Highway Silver Spring, MD 20910-3282

Telephone: 301-713-3272 Fax: 301-713-3302 Web Registration:

http://www.nodc.noaa.gov/cgi-bin/cwatch/puffin

For more information on CoastWatch visit our web page at http://www.nodc.noaa.gov





U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Environmental Satellite, Data and Information Service
National Oceanographic Data Center

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Region/Subregion	Coverage Dates	Res.		Area of coverage
S SouthEast Region SouthEast Synoptic North Carolina South Carolina & Georgia East Florida South Florida West Florida Extended SouthEast Region Full Regional Panel (8 maps)	890315 PRESENT 890216 PRESENT 920623 PRESENT 920623 PRESENT 920623 PRESENT 920624 PRESENT 950131 PRESENT 951025 PRESENT	4.41 1.47 1.47 1.47 1.47 1.47 4.0 1.47	19.34 31.45 30.36 25.02 22.97 24.99 18.00 22.62	37.09 -87.90 -67.63 37.03 -79.83 -73.07 36.01 -81.69 -74.93 30.98 -81.77 -75.01 29.04 -85.04 -78.29 30.95 -87.67 -80.91 34.41 -77.16 -58.78 36.87 -72.77 -87.83
G Great Lakes Great Lakes Synoptic Lake Michigan & Lake Huron Lake Superior, Northern Lake Michigan Lake Huron, Erie, & Ontario Full Regional Panel (8 maps)	901009 PRESENT 901012 PRESENT 901009 PRESENT 901015 PRESENT 940331 PRESENT	3.6 1.8 1.8 1.8	38.88 40.77 43.59 40.77 38.89	50.57 -92.39 -75.85 46.73 -88.05 -79.77 49.28 -92.41 -84.13 46.73 -84.16 -75.88 50.59 -92.40 -75.84
E NorthEast Region NorthEast Synoptic Gulf of Maine Georges Bank Dump Site 106 Southern New England Chesapeake Bay Full Regional Panel (8 maps) Extended Northeast Region	910527 PRESENT 910527 PRESENT 920825 PRESENT 920210 PRESENT 920825 PRESENT 910529 PRESENT 941025 PRESENT 920201 PRESENT	4.41 1.47 1.47 2.00 1.47 1.47 1.47 5.31	30.32 41.09 38.64 34.20 37.64 34.51 17.82 31.84	46.13 -79.00 -58.73 45.98 -71.20 -64.45 43.72 -71.95 -65.20 41.45 -76.01 -66.81 42.80 -75.77 -69.02 39.88 -77.47 -70.71 31.02 -79.73 -98.23 50.04 -66.75 -42.39
M Gulf of Mexico Gulf of Mexico Synoptic Texas Louisiana and Mississippi Yucatan Peninsula West Florida Full Regional Panel (8 maps) C Caribbean Region	910530 PRESENT 920623 PRESENT 920623 PRESENT 920916 PRESENT 920624 PRESENT 920703 PRESENT	1.47 1.47 1.47 1.47 1.47	12.84 24.29 25.04 17.82 25.04 17.82	31.49 -99.11 -78.84 30.29 -97.97 -91.22 31.00 -94.01 -87.25 24.13 -90.37 -83.62 31.00 -87.67 -80.91 31.02 -98.23 -79.73
Jamaica Puerto Rico  W West Coast West Coast Synoptic Northwest Region Southwest Region Oregon Washington Northern California Central California Southern California Nodal Synoptic British Columbia Synoptic Northern Baja Mexico	910529 PRESENT 910606 PRESENT 910606 PRESENT 940112 PRESENT 940112 PRESENT 940112 PRESENT 940112 PRESENT 940112 PRESENT 940112 PRESENT 940112 PRESENT 940301 PRESENT 980625 PRESENT	1.1 1.1 1.1 1.1 5.0 2.5	13.12 14.75 29.74 38.88 28.88 39.94 44.94 29.77 29.94 31.75 47.66 28.55	22.73 -80.04 -69.93 21.17 -70.37 -63.61 50.16 -141.96 -114.98 49.10 -132.09 -121.88 39.10 -124.59 -114.38 45.05 -128.54 -123.43 50.05 -127.54 -122.43 40.05 -125.54 -120.43 50.18 -114.95 -141.98 35.05 -121.54 -116.43 49.11 -138.01 -114.98 54.84 -134.75 -123.24 32.90 -119.03 -113.96

Region/Subregion	Coverage Dates F	Res. Area	of coverage
CalCOFI Synoptic Baja Mexico Synoptic Vancouver Island	980625 PRESENT 980625 PRESENT 980625 PRESENT	2.5 28.57 2.5 22.02 1.1 47.93	38.16 -125.75 -114.24 32.24 -119.35 -107.84 51.21 -127.78 -122.71
H Hawaii Hawaii Synoptic Hawaii Main Is. Mesoscale	911120 PRESENT 931117 PRESENT	10.94 17.15	28.17 -166.22 -147.84 23.25 -160.73 -154.27
A Alaska Aleutian Islands Synoptic Beaufort Chukchi Gulf of Alaska Anchorage Juneau Aleutian Alaska N. synoptic Alaska S. synoptic Bering Strait Unalaska Vancouver Alaska W. synoptic Alaska S. Alaska W.	960304 PRESENT 960304 PRESENT 960311 PRESENT 960304 PRESENT 960311 PRESENT 960326 PRESENT 960304 PRESENT 960304 PRESENT 960327 PRESENT	34.79 1.50 76.59 1.50 74.79 1.50 60.87 1.50 62.14 1.50 59.94 1.50 63.85 74.79 60.87 1.50 68.30 1.50 58.71 1.50 63.85 60.87 63.85	54.97 161.13 200.94 68.32 179.01 -161.73 69.51 150.71 178.91 55.02 -146.10 -132.02 54.77 -159.00 -147.52 53.70 -142.26 -129.32 58.02 -174.81 -159.02 61.71 150.71 -166.51 48.03 -146.10 -122.54 62.56 159.72 178.98 52.86 -172.06 -159.02 48.02 -132.00 -122.52 50.87 -174.81 -148.78 48.02 -146.10 -122.52 50.85 -174.81 -148.77



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